



Department of Commercial Accounting

Cost and Financial Management 2A

CFM22A2 | CFM2AA2

LAST ASSESSMENT OPPORTUNITY

4 JUNE 2016

Time: 180 minutes

Marks: 100

Assessors: Mrs L Boyce, Mrs R Khoza, Mrs L Pelcher, Mrs P Ramutumbu

Moderator: Mrs L Joubert (Internal)

INSTRUCTIONS:

- This paper consists of 13 pages (including the cover page).
- Answer each question on a new page.
- Answer all questions. Show all formulae, calculations and workings clearly.
- Silent, non-programmable calculators may be used.
- Where applicable, round all calculations to **two decimal** places, unless stipulated otherwise.
- Indicate your **INDEX NUMBER** on the front cover of your script.

Question	Topic	Marks	Time
1	Financial statement analysis and interpretation	20	36 minutes
2	Working capital management	20	36 minutes
3	Time value of money	20	36 minutes
4	Bonds, share valuation and cost of capital	20	36 minutes
5	Risk and return	20	36 minutes
		100	180 minutes

QUESTION 1**(20 MARKS)**

- 1.1** For each of the following questions below select the most correct answer and present your answer in the front of the answer book in this format: **2.1.1. A**
(Do not answer at the back of your answer booklet.)
- 1.1.1 The dividend pay-out ratio describes: **(1)**
- a) The proportion of earnings paid to investors as dividends
 - b) The relationship of dividends per share to market price per share
 - c) The percentage change in dividends this year compared to last year
 - d) The relationship of dividends per share to average total assets
- 1.1.2 Which of the following are the requirements of the financial ratios: **(1)**
- a) Meaningful
 - b) Relevant
 - c) Comparable
 - d) All of the above
- 1.1.3 Which of the following are the requirements of the financial statements: **(1)**
- a) Understandable
 - b) Relevant
 - c) Comparable
 - d) All of the above
- 1.1.4 Which of the financial statements recognises only transactions in which cash changes hands? **(1)**
- a) Statement of Financial Position
 - b) Statement of Cash Flows
 - c) Statement of Comprehensive Income
 - d) All of the above
- 1.1.5 Which of the following is not an investment ratio: **(1)**
- a) Earnings per share ratio
 - b) Dividend per share ratio
 - c) Preference dividend ratio
 - d) Price-earnings ratio

- 1.2** Use the information below, of Light House Ltd for the August 2015 financial year-end, to answer the following questions:

	R
Turnover	9 756 000
Gross profit	4 431 000
Other operating income	2 402 000
Operating expenses	1 620 000
Investment income	64 000
Profit before tax	5 262 000
Profit after tax	3 841 000
Non-controlling interest	17 000
Ordinary dividends	196 000
Preference dividends	8 000
Preference share capital	1 000 000
Ordinary share capital	2 500 000
Retained profit	1 901 000
Reserves	2 000 000

REQUIRED:

- 1.2.1 Calculate the total equity for the year. Show all your calculations. **(3)**
- 1.2.2 Calculate the total cost of sales for the year. Show all your calculations. **(2)**
- 1.2.3 Calculate the total operating profit for the year. Show all your calculations. **(2)**
- 1.2.4 Calculate the total finance cost for the year. Show all your calculations. **(2)**
- 1.2.5 Calculate the attributable income for the year. Show all your calculations. **(2)**
- 1.3** Describe one problem or pitfall of financial ratios. **(1)**

- 1.4** Use the information below, of Star Wars Ltd for the December financial year-end, to answer the following questions:

	2015	2014
Attributable earnings	R4 500 000	R3 800 000
Preference dividends	R32 000	R25 000
Ordinary dividends	R30 000	R15 000
Market price per share	R30	R20
Price earnings (P/E) ratio	0.15	0,13
Number of shares in issue	25 000	25 000
Earnings per share ratio	R196 per share	R152 per share

REQUIRED:

- 1.4.1 Calculate the dividend per share (DPS) for 2015. Show the relevant formula. **(2)**
- 1.4.2 Write down the formula for ordinary dividend coverage. **(1)**

QUESTION 2**(20 MARKS)**

2.1 For each of the following questions below select the most correct answer and present your answer in your answer book in this format: **2.1.1. A**

(Do not answer at the back of your answer booklet.)

2.1.1 Which one of the following options is a reason why a company would need cash on hand? **(1)**

- a) Giving customers change from sales transactions
- b) Buying supplies
- c) Paying creditors and other expenses
- d) All of the above

2.1.2 Which one of the following options are examples of cash inflows? **(1)**

- a) Cash sales
- b) Receipts from debtors
- c) Interest received
- d) All of the above

2.1.3 Cash outflows may include all of the following EXCEPT? **(1)**

- a) Tax payments
- b) Rent payments
- c) Depreciation expense
- d) Purchase of fixed assets

2.1.4 Which one of the following options may be the result of a business's cash budget at the end of a given period? **(1)**

- a) Cash surplus
- b) Cash deficit
- c) Net profit
- d) Assessed loss

2.1.5 Company Gee's biggest supplier has offered them credit terms of 3/10 net 60.

The entity uses 360 days per year in its calculations. What is the cost of giving up the cash discount?

(2)

- a) 22.27%
- b) 4.49%
- c) 4.43%
- d) 23.00%

Company Axe sells product Bee. The annual demand for product Bee is 8 000 units. It costs the business R200 to place an order. Storage space costs the business R80 per unit per year. Company Axe waits an average of 5 days for an order to be delivered. The business operates for 360 days in a year.

Use the information presented above to answer questions 2.1.6 and 2.1.7

2.1.6 Calculate the economic order quantity for product Bee.

(2)

- a) 200 units
- b) 40 000 units
- c) 6 400 units
- d) 80 units

2.1.7 Calculate the reorder point for product Bee.

(2)

- a) 111 units
- b) 110 units
- c) 40 000 units
- d) None of the above

- 2.2** Vayo's clothing store needs help with the management of their cash budget and they have asked you for your assistance.

The following information is available:

	February	March	April
Credit Sales	R120 000	R130 000	R140 000
Purchases	R60 000	R65 000	R70 000
Salaries	R11 500	R11 500	R11 500
Overhead expenses	R20 050	R20 500	R20 080

Additional information:

- At the beginning of April, the store had an opening cash balance of R50 000.
- All of Vayo's customers pay 50% cash in the month of the sale and the balance the month thereafter.
- During the month of April, Vayo purchased material for the store and paid for all of it in cash.
- Vayo pays her employees on the 25th of each month.
- The accountant pays all the overhead costs on the 7th of the next month.
- During April, Vayo sold her old sewing machine (Cost price: R10 000) for R5 000.
- The sewing machine was purchased 5 years ago. Depreciation is calculated at 20% per annum.
- Vayo needs to buy a new computer for the store during the month of March. It will cost her R13 000 and she plans to pay for it in instalments of R1 000 per month starting in April.

REQUIRED:

Prepare the cash budget for Vayo's store for the month of April.

(10)

QUESTION 3**(20 MARKS)**

- 3.1** Cathy has been saving for a new car. She wants to buy the car in three years' time. The value of her savings account today is R90 000. The savings account yields an interest of 11% per annum compounded annually. She estimates that the car will cost her R200 000 in three years.

REQUIRED:

How much must she invest annually to have enough money to buy the car? **(4)**

- 3.2** Lilo wants to tick off her bucket list holidays over the next three years. She wants to do one holiday annually starting next year. The first holiday to Italy will cost R19 000, the second holiday is to Phuket which will cost R13 000 and the last one to the Serengeti will cost R30 000.

REQUIRED:

How much should she invest today to withdraw the amounts (enough for each holiday per year) over the next three years? The investment earn 15% interest per annum compounded annually. **(3)**

- 3.3** Wandile just bought a home theatre system on credit. The store offered him an interest rate of 8% per annum compounded quarterly. He will make quarterly payments of R668 for two years.

REQUIRED:

What is the value of the home theatre system that he bought? **(3)**

- 3.4** Gavin invested R100 000 15 years ago. The value of the fund is now R1 000 000.

REQUIRED:

Calculate the interest rate compounded annually that Gavin received on his investment. **(2)**

- 3.5** Zoleka wants to donate a monthly amount of R6 000 to the Cancer Association of South Africa. The monthly amount must grow by 5% per annum. She wants to set up an investment to invest a lump sum today that will transfer the monthly amount to the Cancer Association of South Africa. The bank indicated that the investment will earn interest of 8% per annum compounded annually.

REQUIRED:

Calculate the lump sum that Zoleka must invest today? **(2)**

- 3.6** Dori is looking for a new house. She found a house with an asking price of R1 500 000. She applied for a loan at the bank with a 30 year term. The interest offered is 9% per annum compounded monthly.

REQUIRED:

- 3.6.1 Calculate the monthly repayment. **(3)**
- 3.6.2 Calculate the interest portion paid for month 55. **(1)**
- 3.6.3 Calculate the total capital paid during the 20th year. **(1)**

QUESTION 4**(20 MARKS)**

- 4.1** Olympia Ltd retails sportswear. The company is expecting an increase in profitability in the future due to a marketing campaign that they will be running during the time leading up to the Olympics and 6 months thereafter. Dividends per share for the past year amounted to R25. Growth in dividends is expected to be 7% for two years and then to decrease to 5% thereafter. Shareholders require a return of 15% on their investment. The market value per share is currently R300.

REQUIRED:

- 4.1.1 Calculate the intrinsic value of the share. **(9)**
- 4.1.2 Explain whether the share is under- or overvalued. Give a reason for your answer. **(2)**

- 4.2** Coc Capital is a consulting firm that assists companies in managing their capital structure by approaching potential funders and investors for capital. One of their current clients is seeking a capital structure where the contributions of long term loans and equity will be 20% and 70% respectively. The balance will be funded through redeemable preference share capital. The pre-tax interest rate of the long term loans are estimated at 12%. The cost of the redeemable preference shares is quoted at 10%. The required rate of return for equity is 9%. The contribution to WACC by equity equals 6.30%. Company tax rate is currently 28%.

REQUIRED:

Calculate the weighted average cost of capital that the structure will result in. Present your answer in tabular format. **(6)**

- 4.3** Bond Ltd has issued a bond with a nominal value of R1 000 and a yield to maturity of 8.5%. The bond is trading at R1 050 and has a maturity of 5 years. The bond earns a coupon at the beginning of the period.

REQUIRED:

What is the coupon that is earned on the bond? **(3)**

QUESTION 5**(20 MARKS)**

5.1 For each of the following questions below select the most correct answer and present your answer in your answer book in this format **5.1.1 A**
(Do not answer at the back of your answer booklet.)

5.1.1 What measure is used to assess multi-period average returns? **(1)**

- a) Arithmetic mean
- b) Geometric mean
- c) Both a and b
- d) Neither a nor b

5.1.2 Risk is measured using? **(1)**

- a) Variance and standard deviation
- b) Co-variance and correlation co-efficient
- c) Variance and co-variance
- d) Standard deviation and correlation co-efficient

5.1.3 Which calculation is used to measure the extent to which the returns of a security in a portfolio move together? **(1)**

- a) Co-variance and correlation co-efficient
- b) Co-efficient of variation
- c) Variance
- d) None of the above

5.1.4 Which of the following statements is correct? **(1)**

- i Securities in the same industries tend to be positively correlated.
 - ii Securities in the same industries tend to be negatively correlated.
 - iii Securities in different industries tend to be positively correlated.
 - iv Securities in different industries tend to be negatively correlated.
-
- a) i and iii
 - b) i and iv
 - c) Both a and b
 - d) Neither a nor b

5.1.5 Which of the following are examples of *non-systematic* risks for a company that manufactures consumable goods? (1)

- i The inflation rate spikes nationwide.
- ii An unexpected terrorist event occurs.
- iii The price of maize suddenly spikes.
- iv Taxes on sugar are increased.

- a) Statements (i) and (iii)
- b) Statements (iii) and (iv)
- c) Statements (i) and (ii)
- d) Statements (ii) and (iii)

5.1.6 What kind of risk can never be totally eliminated, irrespective of the size of the portfolio? (1)

- a) Company-specific
- b) Systematic
- c) Non-systematic
- d) Diversifiable

5.2 Company XYZ had returns of 2%, -3%, 11% and 15% in the past four years. Calculate the arithmetic mean return for Company XYZ. (3)

5.3

Return (%)	Expected return (%)	$(r - \bar{r})^2$ (%)	Pr_i (%)	$Pr_i \times (r - \bar{r})^2$ (%)
18	7.8	104.4	10	(A)
20	7.8	(B)	20	29.77
4	7.8	14.44	50	(C)
0	7.8	(D)	20	12.17
			Variance =	(E)
			Standard Deviation =	(F)

REQUIRED:

Calculate **A – F** using your calculator. Round off to two decimals. Only write the answer, **for example A = 2.33** (6)

- 5.4** The estimated return on the market is 10% and the risk free rate of return is 6%. Assume that company WHY's beta is 1.5 and the estimated rate of return is 6%.

REQUIRED:

- 5.4.1 Calculate the required rate of return using the capital asset pricing model. **(3)**
- 5.4.2 Would you purchase the shares of company WHY? Provide a reason for your answer. **(2)**

[TOTAL = 100]